

	<b>Ordering of Hazardous Materials including all CEMS Inventoried Substances (DRAFT)</b>	<b>EHS-CEMS-SOP.01 rev.00</b> <b>Effective Date:</b> <b>Revision Date:</b>
---	--	--

## **1. Purpose and Applicability**

- 1.1. This document provides the procedures required for the ordering of hazardous materials, as well as other substances tracked through the CEMS (*Chemical Environmental Management System*) inventory database. These procedures cover materials that will be ordered via Procard or Purchase Order. Hazardous Materials need to be handled by trained personnel and the majority of these materials will require bar coding. It is important that the inventoried materials be entered into the CEMS database correctly to include storage areas, hazards and the responsible owner, especially for safety and emergency response reasons.
- 1.2. Various procedures including variances in the “ship to” addresses will be required during the ordering process, see “*2.8 CEMS Inventoried Substance List*”
  - 1.2.1. The majority of substances will need to be recorded into the CEMS inventory database, and thus, shipped to Laboratory Health and Safety Services. A trained staff member will receive and bar code the primary container, enter the material onto the CEMS database, and then deliver it to the appropriate storage location as noted on the packing slip.
  - 1.2.2. Other hazardous materials may not require bar coding and should be shipped directly to the laboratory.
  - 1.2.3. Hazardous materials purchased directly from a store must be bar coded under the direction of the responsible owner.
  - 1.2.4. Radioactive materials have their own procedures and will be shipped to Environmental Health and Safety.

## **2. Definitions**

- 2.1. **Carrier** – Transport from vendor to the University (e.g. UPS, FedEx , DHL)
- 2.2. **Laboratory** – Any room operated by the University of Massachusetts that will store hazardous materials and/or non-hazardous CEMS inventoried substances. Examples include the traditional science laboratories as well as art studios, film developing rooms, theater set design rooms, etc.
- 2.3. **Laboratory Health and Safety Services** – Located in Lederle Graduate Research Tower Room 125. Will bar code primary containers, enter substance into CEMS, and deliver package to storage locations.
- 2.4. **Ordering Personnel** – The individual that actually places the order via Procard or Purchase Order.
- 2.5. **Responsible Owner** – The individual ultimately responsible for the hazardous material. This in most cases will be the PI.
- 2.6. **Storage Location** – The building and room number where the substance will be stored.

2.7. **Vendor** – The Company where the order is placed. In some cases the vendor will act as a distributor and will have a package shipped directly from the manufacturer.

## 2.8. CEMS Inventoried Substance List

Shipped to LGRT and CEMS Inventoried (bar-coded)	Shipped Directly to Building and CEMS Inventoried (bar-coded)	Shipped to Building, NOT in CEMS (not bar-coded)
<p><b>Flammable/Combustible Liquids</b> (e.g. alcohols, solvents, lubricants, paint thinner, aerosols, paint)</p> <p><b>Flammable Solids</b> (e.g. magnesium, sodium, organo metallics)</p> <p><b>Oxidizers</b> (e.g. concentrated mineral acids, bromates, chlorates, permanganates)</p> <p><b>Organic Peroxides</b> - (e.g.. hydrogen peroxide &gt;8%, benzoyl peroxide)</p> <p><b>Poisons</b> – not included in the above categories (i.e. biological toxins, dyes, glazes, paints, adhesives, and specimen solutions)</p> <p><b>Corrosives</b> – (e.g. acids or bases which are corrosive to the skin and other materials having a pH less than 5.5 or greater than 11.0</p> <p><b>Controlled substances</b> – (e.g. Drug Enforcement Agency “DEA” listed)</p> <p><b>Growth Media</b></p> <p><b>Salts</b></p> <p><b>Non-hazardous Buffers</b></p> <p><b>Non-hazardous substances tracked for inventory purposes</b></p>	<p><b>Compressed Gases</b> – including liquefied gases</p> <p>Chemical Packages weighing greater than <b>50 pounds</b></p> <p><b>Hazardous Retail Items bought directly from a store</b> – used as an integral part of the function of the laboratory (e.g. paint thinners, paints, ceramic glazes)</p>	<p><b>Retail Products</b> – used for routine household-like activities (e.g. cleansers, dish soap)</p> <p>Materials expended within 1 to 2 days – <b>working solutions</b></p> <p><b>Molecular Biological Reagents and Enzyme preparations</b></p> <p><b>Biological Materials</b> to include biohazardous materials – (e.g. plant or animal tissue, reproducing biological organisms, bacteria, viruses, fungi, and yeast)</p> <p><b>Radioactive Materials</b> – ordered via Purchase Order and shipped to Draper Hall</p> <p>Materials stored and shipped on <b>dry ice</b></p>

### **3. Roles and Responsibilities**

- 3.1 **Laboratory Health and Safety Services** – Will receive the packages, barcode the primary container, repack in original container and distribute the CEMS inventoried substance in a timely fashion to the appropriate location.
- 3.2 **Ordering Personnel** – Must provide the vendor all the appropriate information for the proper ordering, shipment, and final storage location. The Ordering Personnel will include in the Attention Line (Procard) or Comment Panel (Purchase Order) the Responsible Owner and storage location (building and room number).
- 3.3 **Responsible Owner** – Responsible for the receipt of the hazardous material into the storage location. Signatures of Responsible Owners or authorized personnel will be required.
- 3.4 **Vendor** – Properly package the hazardous materials and provide the carrier with the proper shipping address, in most cases LGRT125. The package must include an invoice or packing list, which will list the name and quantity of hazardous material, the responsible owner, storage location and the UMass delivery destination, if delivery will be made to a different location other than the storage location.

### **4. Procedures**

#### **4.1. Hazardous Materials Shipped to Laboratory Health and Safety Services, LGRT 125**

- 4.1.1. Order hazardous materials including all CEMS inventoried substances via normal Purchase Order or Procard procedures.
- 4.1.2. Only CEMS inventoried substances shall be placed on this order. Other laboratory supplies must be placed on a different order and should be delivered directly to the using department via Distribution Services.
- 4.1.3. Direct the vendor to ship the Substances to the following address:

*University of Massachusetts  
Room 125 Lederle Graduate Research Tower  
710 North Pleasant Street  
Amherst, MA 01003  
ATTN: "See 4.1.4"*

NOTE: On the PO header panel, change the "Ship to" default icon to "CHEMS". This will auto populate the above address.

- 4.1.4. Laboratory Health and Safety Services requires the following information to appear on the packing slip for delivery and bar coding purposes:

*Name of Responsible Owner  
Storage Location (Building and Room Number)*

- 4.1.4.1. **Procard** users shall have this information appear on the **ATTN** line. Due to space constraints building names may need to be abbreviated

Examples: Bill Smith LGRT 1003  
Jane Doe Conte B162  
J. McBiological Morrill IV N451

#### **4.1.4.2. Purchase Orders/Blanket Purchase Orders**

List the Responsible Owner and Storage Location in the **attn:** line of the Shipping Address or in the “**Comments**” Panel (Remember to click the <send to vendor> checkbox).

Use **Account Code 739630** – Chemicals, except radioactive chemicals

For **Blanket Orders** remember to switch the default ship to address to “**CHEMS**” (LGRT 125) with Attn: < Responsible Owner and Storage Location>

- 4.1.4.3.** In some cases the responsible owner may wish the CEMS inventoried substance be delivered to a destination other than the final storage location. Please list this destination in the “comments panel” on a Purchase Order and where appropriate when placing an order through a Procard. In all cases the storage location must be listed.

### **4.2. Hazardous Materials Shipped Directly to the Departments**

- 4.2.1.** Order the hazardous material via normal Purchase Order or Procard procedures.
- 4.2.2.** Other laboratory supplies may be placed on the same order.
- 4.2.3.** The ship to address will list the preferred destination of the responsible owner, however a person trained in the receipt of hazardous materials should accept the package.
- 4.2.4.** The Responsible Owner is responsible for bar coding CEMS inventoried substances
  - 4.2.4.1.** Bar Code and write the substance onto the “Chemical Inventory Order Log” which will be picked up by Laboratory Health and Safety Services or enter the substance directly into the CEMS database <Add Inventory>.
  - 4.2.4.2.** Gas Cylinders – may place a bar code above the storage area of the cylinder if the chemical and size of the cylinders are consistent. Use Account Code 739610 –Gases, Demurrage, and Cylinder Lease if ordering via Purchase Order
  - 4.2.4.3.** Chemicals that weigh over 50 pounds
  - 4.2.4.4.** Hazardous Chemicals bought directly from a store to be used as an integral part of the laboratory

### **4.3. Radioactive Materials**

- 4.3.1.** All purchases of radioactive materials must be approved by the campus Radiation Protection Officer, who is authorized by the Radioisotope Safety Committee to approve purchases within authorized user limits. This is very important, because, by Federal regulation, the campus is allowed to maintain only a limited amount of radioactive material at any given time.
- 4.3.2.** Departments shall notify the Department of Environmental Health & Safety of the pending purchase of any radioactive material by furnishing EH&S with a copy (if off line to the automated purchasing system) or a screen print (if on line to the automated purchasing system) of the Purchase Order. Emergency (expedited) purchases must receive the prior verbal approval of the Radiation Protection Officer before any commitment is made to the vendor.
- 4.3.3.** Requests for radioactive materials shall not be made against Blanket Purchase Orders. Only line-item Purchase Order Requests may be issued
- 4.3.4.** Use **Account Code 739650** – Radioactive Materials

- 4.3.5. Each shipment of radioactive materials shall be delivered directly to the following address:

*University of Massachusetts  
Department of Environmental Health and Safety  
Room 117 Draper Hall  
40 Campus Center Way  
Amherst, MA 01003*

- 4.3.6. EH&S will deliver the shipment to the respective ordering department

## **5. Key References**